



the VLSI chip each have a surface with regions adapted to forming electrical contacts, and wherein electrical contacts formed from indium metal are made between the pixels of the semiconductor detector and regions on the VLSI chip corresponding thereto, and wherein the surfaces of pixilated detector and the VLSI chip are separated by about 15 to about 100 $\mu$ m.

6. A method of forming predetermined electrical contacts on a detector comprising:

constraining a shadow mask having an array of holes in desired locations 10 to 100 $\mu$ m above a surface on the detector, aligning the mask above the detector, and evaporating indium metal under vacuum through holes in the mask onto the surface of the detector to form the contacts.

7. The method of claim 6, further comprising the step of bump-bonding the detector to readout chip that has indium bumps similarly positioned upon a surface.

8. A method of forming predetermined electrical contacts on a chip comprising:

the steps of constraining a shadow mask having an array of holes in desired locations about 10 to about 100 $\mu$ m above a

